

luminous sheet B is prepared by pasting the common electrodes B2 and B5 so as to face each other.

[0092] Finally, the prepared luminous sheet B is pasted to the below of the display sheet A so as the luminous sheet B irradiates the display sheet A.

[0093] Besides, the display medium A4 to be applied to the display sheet A is not necessary to be limited to the abovementioned nonvolatile material. For instance, it is possible to adopt as the display medium a microcapsule containing the dye material combined with particles having the positive charge, the material combined with particles having the negative charge (of which PH is opposite to the dye material), and so on. The structure of such microcapsule was disclosed in details in PCT Japanese translation publication No. 11-502950.

[0094] The black and white displaying of pixels is performed by the matrix control offering the following shutter function. That is to say, when a specific voltage is impressed between the row electrode A5 and the column electrode A3 of the display sheet A, molecules of the display medium A4 are orientated to the direction for which the light is not transmissive (the shutter is ON), and thereby the pixels specified by the row electrode A5 and the column electrode A3 are displayed in black. On the other hand, when the voltage against the specific voltage (which is called "positive voltage") is impressed, the molecules of the display medium A4 are aligned to the direction for which the light is transmissive (the shutter is OFF), thereby the pixels are displayed in white.

[0095] Meanwhile, when the voltage is impressed between the common electrodes B2 and B5 of the luminous sheet B, the entire aspect of the luminous medium B4 irradiates the display sheet A. That is to say, the luminous medium B4 is luminous, white pixels (of which the shutter is OFF) that the light can pass by is to be lighted.

[0096] Besides, since the luminous medium B4 is formed in a specific pattern as above, the common electrodes B2 and B5 of the luminous sheet B change to individual electrodes in the form of grid (that is to say, a row electrode and a column electrode) and the voltage to be impressed on changes per individual electrode. Thereby it is possible to irradiate only areas to be emphasized such as a title area and so on.

[0097] In case of making the luminous sheet B radiate in mono color, the light source of one color may be placed uniformly on the entire aspect of the sheet, while in full colors, the light sources of RGB (Red, Green and Blue) should be placed on the sheet in the form of grid. In case of making the entire aspect of the sheet radiate even in full colors, it is not necessary to change to the individual electrodes but the luminous sheet may have the common electrode B2 and B5.

[0098] [EMBODIMENT 1]

[0099] In the first place, when the electronic paper file 100 is powered on as fixed and arranged the connecting terminals 21 of the cover, the attachable state detecting means 30 starts up. The attachable state detecting means 30 notifies number-of-pages recognizing means 303 whether the electronic paper 101 is attached or detached on or from the connecting terminal 21.

[0100] In response to the notice from the attachable state detecting means 30, the number-of-pages recognizing means recognizes the number of electronic papers 101 attached to the cover 102 (FIG. 4, S1). Besides, the processing, that the attachable state detecting means 30 notifies the first display control means 106 of the connecting order ID number of the connecting terminal to which the electronic paper is attached, is the same as in the above.

[0101] On the other hand, in case where the connecting terminal 21 is connected to the movable axis part 50 as shown in FIG. 15, when the electronic paper file is powered on, the attachable state detecting means 30 and the position detecting means 36 start up. The started attachable state detecting means 30 notifies the number-of-pages recognizing means 303 of the attachable state of the electronic papers 101 and also notifies the first display control means 106 of the connecting order ID number imparted as above.

[0102] The invention is explained according to the assumption that the electronic papers are attached to the connecting terminals 21 of the connecting terminal ID Nos. 1 to 5. And it is also assumed that when the electronic paper file is powered on, the first display control means 106 displays the display-data stored in the first storage means 105 on the electronic papers 101 in sequence from the top page.

[0103] In other words, when the electronic paper file is powered on, the first display control means 106 displays the first to fifth pages of the display-data on respective electronic papers 101 connected with the connecting terminals of the connecting terminal ID Nos. 1 to 5. Besides, in order to look through the other pages, the desired page number may be displayed on the page number display means 107 by means of a page feed button 302 provided on the page selecting means 108.

[0104] In the initial setting, when the page feed button 302 (which comprising an forward key 302a and a backward key 302b, for example) is pressed down one time, the page feed means starts up, and the display-data to be displayed on the display unit 121 is moved forward or backward one page. For instance, while the display unit 121 is displaying pp. 1 to 5, if pp. 2 to 6 are desired to be displayed on the display unit 121, the page feed button 302a is pressed down one time (FIG. 4, S2).

[0105] At this time, the page feed means judges whether only the first page or the last page of the display-data is displayed on the electronic paper 101 (FIG. 4, S3). In case of determining that only the first or the last page is displayed, the operation of pressing down the forward key 302a or the backward key 302b gets invalid (FIG. 4, S6). In this case, since the electronic papers 101 display pp. 1 to 5, the pressing of the forward key 302a is valid and then the page number display means 107 displays "2".

[0106] In the next place, after the user confirms that "2" is displayed as above (FIG. 4, S4), he presses a transfer button 310 including the page selecting means 108 (FIG. 4, S5). Thereby the page number ("2" in here) displayed on the page number display means 107 is transferred to the first display control means 106.

[0107] The first display control means 106 obtains pp. 2 to 6 of the display-data from the first storage means 105, if necessary, converts the data to the dot data and transfers the